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Amendment to the Claims:

Claims 1 - 9 (cancelled)

10. (new) A concrete pavement for highways and streets of the preset strength safety level and thickness less by 8-10% than the thickness of pavement provided by the Portland Cement Association Engineering Bulletin EB109P, wherein mix design of concrete of pavement is determined by the value of modulus of rupture (MR) required according to said Portland Cement Association Engineering Bulletin EB109P and equal to the mean value of 28-day flexural strength, reduction of thickness being provided by more complete utilization of flexural strength of concrete considered a random value than that provided by Portland Cement Association design practice of utilization of this strength.

11. (new) A concrete pavement of claim 10 wherein more complete utilization of flexural strength means the thickness design of pavement according to said Portland Cement Association Engineering Bulletin EB109P with the consecutive use of a plurality of values of modulus of rupture of concrete (MR) exceeding the mean value of flexural strength and a corresponding reduction of thickness of pavement, strength safety of pavement of reduced thickness at least corresponding to said preset strength safety level, the sufficiency of reduced values of thickness of pavement corresponding to these values of modulus of rupture exceeding the mean value of flexural strength of

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concrete being compared against requirements of said Portland Cement Association Engineering Bulletin EB109P thickness design procedure..

12. (new) A concrete pavement of claim 10 wherein more complete utilization of flexural strength means the thickness design of pavement according to said Portland Cement Association Engineering Bulletin EB109P with the consecutive use of a plurality of values of modulus of rupture of concrete (MR) exceeding the mean value of flexural strength and a corresponding reduction of thickness of pavement, strength safety of pavement of reduced thickness at least corresponding to said preset strength safety level, the sufficiency of reduced values of thickness of pavement corresponding to these values of modulus of rupture exceeding the mean value of flexural strength of concrete being compared against requirements of other recognized methods of thickness design according to the requirements of the customer.

13. (new) A concrete pavement for highways and streets of a preset strength safety level and thickness less by 8-10% than the thickness of pavement of the same traffic loading provided by the Portland Cement Association Engineering Bulletin EB109P, reduction of thickness being provided by more complete utilization of flexural strength of concrete considered as a random value than that provided by Portland Cement Association design practice of utilization of this strength, wherein mix design of

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concrete of pavement is determined by the value of modulus of rupture (MR) required according to said Portland Cement Association Engineering Bulletin EB109P thickness design procedure and equal to the mean value of 28-day flexural strength, more complete utilization of flexural strength of concrete, as applied to concrete pavement design meaning consecutive use of a plurality of values of modulus of rupture of concrete (MR) exceeding the mean value of flexural strength, the increase of value of modulus of rupture with the corresponding increase in design strength providing a reduction in thickness of pavement.

14. (new) A concrete pavement for highways and streets of uninterrupted traffic flow and high volumes of truck traffic according to claim 10 wherein the required preset strength safety level of pavement corresponds to the strength safety index  $\beta$  equal at least to about 3 and stress ratio factor not exceeding 0.5, the thickness design of pavement being carried out with the consecutive use of the three values of modulus of rupture of concrete (MR) with the difference of 50 psi being considered corresponding to the one value of specified compressive strength of the concrete  $f_c^1$ , the least of these three values being the value of modulus of rupture (MR) required according to said Portland Cement Association Engineering Bulletin EB109P thickness design procedure and equal to the mean value of 28-day flexural strength, the strength safety of pavement of thickness corresponding to any of these values of modulus of

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rupture being not less than that corresponding to the strength safety index  $\beta$  equal at least to about 3.

15. (new) A concrete pavement of highways and arterial streets of moderate volumes of truck traffic according to claim 10 wherein the required preset strength safety level corresponds to the strength safety index  $\beta$  equal at least to about 2.5 and stress ratio factor not exceeding 0.5, thickness design of pavement being carried out with the consecutive use of three values of modulus of rupture of concrete (MR) with the difference of 50 psi considered corresponding to the one value of specified compressive strength of this concrete  $f_c^1$ , the least of these three values being the value of modulus of rupture (MR) required according to the current Portland Cement Association Engineering Bulletin EB109P thickness design procedure and equal to the mean value of 28-day flexural strength, the strength safety of pavement of thickness corresponding to any of these values of modulus of rupture being not less than that corresponding to strength safety index  $\beta$  equal at least to about 2.5.

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16. (new) A concrete pavement of roads, residential streets, and other streets of low volumes of truck traffic according to claim 10 wherein required preset strength safety level corresponds to the strength safety index  $\beta$  equal at least to about 2.0 and stress ratio factor not exceeding 0.5, thickness design of pavement being carried out with consecutive use of three values of modulus of rupture of concrete (MR) with the difference of 50 psi corresponding to the one value of specified compressive strength of this concrete  $f_c^1$ , the least of these three values being the value of modulus of rupture (MR) required according to the current Portland Cement Association Engineering Bulletin EB109P thickness design procedure and equal to the mean value of 28-day flexural strength, the strength safety of pavement of thickness corresponding to any of these values of modulus of rupture being not less than that corresponding to strength safety index  $\beta$  equal at least to about 2.0.

17. (new) A concrete pavement as claimed in claim 14 wherein the sufficiency of values of thickness of pavement corresponding to said values of modulus of rupture exceeding the mean value of flexural strength of concrete being compared against the requirements of other recognized methods of thickness design according to the requirements of the customer.

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18. (new) A concrete pavement as claimed in claim 14 wherein the sufficiency of values of thickness of pavement corresponding to said values of modulus of rupture exceeding the mean value of flexural strength of concrete being compared against the requirements of said Portland Cement Association Engineering Bulletin EB109P.

19. (new) A concrete pavement as claimed in claim 15 wherein the sufficiency of values of thickness of pavement corresponding to said values of modulus of rupture exceeding the mean value of flexural strength of concrete being compared against the requirements of other recognized methods of thickness design according to the requirements of the customer.

20. (new) A concrete pavement as claimed in claim 14 wherein the sufficiency of values of thickness of pavement corresponding to said values of modulus of rupture exceeding the mean value of flexural strength of concrete being compared against the requirements of said Portland Cement Association Engineering Bulletin EB109P.

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21 (new) A concrete pavement as claimed in claim 16 wherein the sufficiency of values of thickness of pavement corresponding to said values of modulus of rupture exceeding the mean value of flexural strength of concrete being compared against the requirements of other recognized methods of thickness design according to the requirements of the customer.

22. (new) A concrete pavement as claimed in claim 14 wherein the sufficiency of values of thickness of pavement corresponding to said values of modulus of rupture exceeding the mean value of flexural strength of concrete being compared against the requirements of said Portland Cement Association Engineering Bulletin EB109P.

23. (new) Concrete pavement of claim 10 wherein the mix design of said concrete, determined by the value of modulus of rupture (MR) required according to Portland Cement Association Engineering Bulletin EB109P and equal to the mean value of 28-day flexural strength, is replaced by more convenient mix design according to the value of specified compressive strength  $f_c^1$  corresponding to said value of modulus rupture of this concrete.

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24. A mix design of concrete of pavement of claim 23 wherein the values of modulus of rupture (MR) equal to 550, 600, 650, 700, and 750 psi are considered corresponding to the values of specified compressive strength  $f_c^1$  equal to 3,000, 3,500, 4,000, 4,500, and 5,000 psi, respectively.